G.N. 537 Commerce, Industry and Technology Bureau

ELECTRONIC TRANSACTIONS ORDINANCE (Chapter 553)

Pursuant to section 11(2) of the Electronic Transactions Ordinance, NOTICE is hereby given that the following requirements shall apply with effect from 1 March 2005 (‘ Effective Date’):-

(I) The information given or presented, document served or the signature made in the form of an electronic record, as the case may be, for the purposes of an ordinance (including any subsidiary legislation made thereunder) (the Ordinance) to which the Electronic Transactions Ordinance applies will not satisfy the Ordinance unless it complies with all the requirements herein specified, subject to the respective additional requirements or relaxation, if any, stipulated in (II) below.

1. Electronic records which contain English characters only shall be coded in American Standard Code for Information Interchange (ASCII) or ISO 10646-1:2000.

2. Electronic records which contain Chinese characters shall be coded as follows:

   (a) Chinese characters shall be coded in Big-5 and English characters shall be coded in ASCII, and the set of Chinese characters is restricted to the characters defined in Big-5 or the characters included in the Hong Kong Supplementary Character Set (HKSCS) published by the Government in 2001; or

   (b) Chinese and English characters shall be coded in ISO 10646-1:2000, and the set of Chinese characters is restricted to the Chinese characters within the Chinese-Japanese-Korean (CJK) Unified Ideographs defined in ISO 10646-1:2000 or the characters included in the HKSCS published by the Government in 2001.

3. Where electronic records are compressed, the following compression standards shall be followed: -

   (a) Zip file (.zip); or

   (b) GNU zip file (.gz)

4. Electronic records shall be sent as follows:-

   (a) through electronic mail conforming to the Simple Mail Transfer Protocol (SMTP), and either Multipurpose Internet Mail Extension (MIME) or the Secure Multipurpose Internet Mail Extension (S/MIME) standard and with size not exceeding 5 MB;

   (b) in the form of 1.44MB diskette with size of 3.5 inches in MS-DOS format for files not exceeding one diskette’ s storage capacity; or

   (c) in the form of CD-ROM in ISO 9660 format.

5. Electronic records shall follow the following file format standards:-

   (a) Plain text (TXT);

   (b) Microsoft Rich Text Format (RTF);

(c) Hypertext Mark Up Language (HTML) Format; or

(d) Adobe Portable Document Format (PDF) (compatible to Acrobat version 3, 4, 5 or 6).

6. Graphics in electronic records shall follow the following graphic file formats:–

(a) Encapsulated PostScript Files (EPSF);

(b) Tag Image File Format (TIFF);

(c) Portable Network Graphics (PNG);

(d) Graphics Interchange Format (GIF); or

(e) Joint Photographic Experts Group (JPEG).

7. Computer Aided Design (CAD) drawings in electronic records shall follow the following CAD file format:–

(a) Autodesk Drawing Exchange Format (DXF).

8. An electronic record given, presented or served under a statutory provision must be signed with a digital signature if:–

(a) the provision expressly requires the signature of a person; or

(b) the provision requires the submission to be made in a specified form and the specified form has a signature requirement.

9. A digital signature shall be attached to an electronic record in accordance with the Secure Multipurpose Internet Mail Extension (S/MIME) standard or the Public-Key Cryptography Standards (PKCS#7).

10. For an electronic record which comprises multiple electronic files and which has to be signed, each individual file shall be separately signed digitally.

11. Electronic records given, presented or served shall not contain any computer instructions, including but not limited to:-

(a) computer viruses; and

(b) macros, scripts and fields that depend on the execution environment and the execution of which will cause changes to the electronic record itself or the information system displaying the electronic record.

12. For submission of Government forms to Government, the Electronic Government Forms (in the form of a software) should be used to generate electronic records and, if required, to make digital signatures. The format of individual supporting document, if any, attached in an electronic record should comply with all the relevant requirements specified in (I), except (I)12.

(II) The following relaxation and additional requirements, as the case may be, shall apply as specified:-

1. For submission of forms specified by the Building Authority under section 22(4) of the Buildings Ordinance (Chapter 123), the electronic records of the forms involved shall follow the Microsoft Rich Text Format only.

2. For the provision listed below, electronic records in any format are acceptable.

Chapter 448B	Hong Kong Civil Aviation (Investigation of Accidents) Regulations, Regulation 9(a)

3. For the ordinance listed below, electronic records in spreadsheet format using templates provided by the Commissioner for Census and Statistics are acceptable.

Chapter 316	Census and Statistics Ordinance

4. For the ordinances listed below, electronic records in format using templates provided by the Mandatory Provident Fund Schemes Authority are acceptable.

Chapter 426	Occupational Retirement Schemes Ordinance
Chapter 485	Mandatory Provident Fund Schemes Ordinance

5. For the ordinances listed below, electronic records in MicroStation DGN Format and Initial Graphic Exchange Specification (IGES) Format are acceptable for submission of Computer Aided Design (CAD) drawings.

Chapter 147	Sand Ordinance
Chapter 285	Mining Ordinance
Chapter 438	Sewage Tunnels (Statutory Easements) Ordinance
Chapter 446	Land Drainage Ordinance
Chapter 463	Sewage Services Ordinance

6. For the ordinances listed below, electronic records in Initial Graphic Exchange Specification (IGES) Format is acceptable for submission of Computer Aided Design (CAD) drawings.

Chapter 51	Gas Safety Ordinance
Chapter 102	Waterworks Ordinance
Chapter 211	Aerial Ropeways (Safety) Ordinance
Chapter 265	Peak Tramway Ordinance
Chapter 327	Lifts and Escalators (Safety) Ordinance
Chapter 406	Electricity Ordinance
Chapter 449	Amusement Rides (Safety) Ordinance
Chapter 470	Builders' Lifts and Tower Working Platforms (Safety) Ordinance

7. For the ordinances listed below, electronic records in AutoCAD Release 14 for Windows Format is acceptable for submission of Computer Aided Design (CAD) drawings. Scanned image of size larger than A3 is not acceptable.

Chapter 311	Air Pollution Control Ordinance
Chapter 354	Waste Disposal Ordinance
Chapter 358	Water Pollution Control Ordinance
Chapter 400	Noise Control Ordinance
Chapter 403	Ozone Layer Protection Ordinance
Chapter 466	Dumping At Sea Ordinance

8. For the ordinances listed below, electronic records in MicroStation DGN Format and Initial Graphic Exchange Specification (IGES) Format are acceptable for submission of Computer Aided Design (CAD) drawings.

Chapter 28	Land (Miscellaneous Provisions) Ordinance
Chapter 107	Tramway Ordinance
Chapter 215	Eastern Harbour Crossing Ordinance

Chapter 374	Road Traffic Ordinance [except Road Traffic (Registration and Licensing of Vehicles) Regulations (Chapter 374E)]
Chapter 393	Tate's Cairn Tunnel Ordinance
Chapter 436	Western Harbour Crossing Ordinance
Chapter 474	Tai Lam Tunnel And Yuen Long Approach Road Ordinance
Chapter 498	Tsing Ma Control Area Ordinance
Chapter 520	Discovery Bay Tunnel Link Ordinance

9. For the ordinances listed below, electronic records in diskette and CD-ROM are not acceptable.

Chapter 115	Immigration Ordinance
Chapter 174	Births and Deaths Registration Ordinance
Chapter 177	Registration of Persons Ordinance
Chapter 181	Marriage Ordinance
Chapter 374E	Road Traffic (Registration and Licensing of Vehicles) Regulations

10. For the ordinances listed below, electronic records in MicroStation DGN Format, Initial Graphic Exchange Specification (IGES) Format, Arc/Info Export Format (E00) and Arc/Info Native Format (COV) are acceptable for submission of Computer Aided Design (CAD) drawings and spatial data.

Chapter 124	Lands Resumption Ordinance
Chapter 125	Government Rent and Premium (Apportionment) Ordinance
Chapter 126	Government Rights (Re-entry and Vesting Remedies) Ordinance
Chapter 127	Foreshore and Sea-bed (Reclamations) Ordinance
Chapter 130	Land Acquisition (Possessory Title) Ordinance
Chapter 276	Mass Transit Railway (Land Resumption and Related Provisions) Ordinance
Chapter 495	New Territories Land Exchange Entitlements (Redemption) Ordinance

11. For the provisions listed below, electronic records and any digital signatures associated with the electronic records, given or presented to Government through the Electronic Service Delivery (ESD) System are acceptable.

Chapter 112	Inland Revenue Ordinance, Section 51(8)
Chapter 174	Births and Death Registration Ordinance, Section 22
Chapter 175	Births Registration (Special Registers) Ordinance, Section 7
Chapter 176	Deaths Registration (Special Registers) Ordinance, Section 7
Chapter 178	Marriage Reform Ordinance, Section 13
Chapter 181	Marriage Ordinance, Section 26
Chapter 310	Business Registration Ordinance, Sections 5 and 8
Chapter 310A	Business Registration Regulations, Regulation 3
Chapter 374	Road Traffic Ordinance, Section 78
Chapter 374B	Road Traffic (Driving Licences) Regulations, Regulations 12B, 15, 18 and 31
Chapter 374E	Road Traffic (Registration and Licensing of Vehicles) Regulations, Regulations 4, 13, 14, 19 and 21
Chapter 541A	Electoral Affairs Commission (Registration of Electors) (Legislative Council Geographical Constituencies) (District Council Constituencies) Regulation
Chapter 541B	Electoral Affairs Commission (Registration) (Electors for Legislative Council Functional Constituencies) (Voters for Election Committee Subsectors) (Members of Election Committee) Regulation

12. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Civil Engineering and Development Department shall follow requirements set out in ‘CAD Standard for Works Projects’ promulgated by the Environment, Transport and Works Bureau.

Chapter 28	Land (Miscellaneous Provisions) Ordinance
Chapter 147	Sand Ordinance
Chapter 285	Mining Ordinance
Chapter 295	Dangerous Goods Ordinance

13. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Drainage Services Department shall follow requirements set out in ‘CAD Standard for Works Projects’ promulgated by the Environment, Transport and Works Bureau.

Chapter 436	Western Harbour Crossing Ordinance
Chapter 438	Sewage Tunnels (Statutory Easements) Ordinance
Chapter 446	Land Drainage Ordinance

14. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Electrical and Mechanical Services Department shall follow requirements set out in ‘CAD Standard for Works Projects’ promulgated by the Environment, Transport and Works Bureau.

Chapter 51	Gas Safety Ordinance
Chapter 211	Aerial Ropeways (Safety) Ordinance
Chapter 265	Peak Tramway Ordinance
Chapter 327	Lifts And Escalators (Safety) Ordinance
Chapter 406	Electricity Ordinance
Chapter 449	Amusement Rides (Safety) Ordinance
Chapter 470	Builders' Lifts And Tower Working Platforms (Safety) Ordinance

15. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Environmental Protection Department shall follow requirements set out in ‘CAD Standard for Works Projects’ promulgated by the Environment, Transport and Works Bureau.

Chapter 311	Air Pollution Control Ordinance
Chapter 354	Waste Disposal Ordinance
Chapter 358	Water Pollution Control Ordinance
Chapter 400	Noise Control Ordinance
Chapter 403	Ozone Layer Protection Ordinance
Chapter 466	Dumping At Sea Ordinance

16. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Highways Department shall follow requirements set out in ‘CAD Standard for Works Projects’ promulgated by the Environment, Transport and Works Bureau.

Chapter 28	Land (Miscellaneous Provisions) Ordinance
Chapter 107	Tramway Ordinance
Chapter 215	Eastern Harbour Crossing Ordinance
Chapter 374	Road Traffic Ordinance
Chapter 393	Tate's Cairn Tunnel Ordinance
Chapter 436	Western Harbour Crossing Ordinance
Chapter 474	Tai Lam Tunnel And Yuen Long Approach Road Ordinance
Chapter 498	Tsing Ma Control Area Ordinance
Chapter 520	Discovery Bay Tunnel Link Ordinance

17. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Transport Department shall follow requirements set out in 'CAD Standard for Works Projects' promulgated by the Environment, Transport and Works Bureau.

Chapter 104	Ferry Services Ordinance
Chapter 230	Public Bus Services Ordinance
Chapter 368	Road Tunnels (Government) Ordinance
Chapter 374	Road Traffic Ordinance

18. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Environment, Transport and Works Bureau shall follow requirements set out in 'CAD Standard for Works Projects' promulgated by the Environment, Transport and Works Bureau.

Chapter 372	Kowloon-Canton Railway Corporation Ordinance
Chapter 556	Mass Transit Railway Ordinance

19. For the ordinances listed below, CAD drawings in the form of electronic records given or presented to Lands Department shall follow requirements set out in 'CAD Standard for Works Projects' promulgated by the Environment, Transport and Works Bureau.

Chapter 125	Government Rent and Premium (Apportionment) Ordinance
Chapter 126	Government Rights (Re-entry and Vesting Remedies) Ordinance
Chapter 495	New Territories Land Exchange Entitlements (Redemption) Ordinance

20. It is acceptable for electronic records to be given or presented and digital signatures associated with the electronic records to be made to the Director-General of Trade and Industry through the E-applications System for Strategic Commodities Licensing (E-SC) in relation to the application and issuance of licences for the purposes of Section 6A(2) and (4) of the Import and Export Ordinance (Cap. 60).

21. For the ordinance listed below, duplicates of land boundary plans in the form of electronic records deposited with the Land Survey Authority shall be generated by scanning the original land boundary plans that bear the handwritten signature of the authorized land surveyor and shall follow the Adobe Portable Document Format (PDF).

Chapter 473	Land Survey Ordinance

22. For the ordinance listed below, survey record plans in the form of electronic records deposited with the Land Survey Authority shall follow the Adobe Portable Document Format (PDF).

Chapter 473	Land Survey Ordinance

(III) The following words or terms used in this Notice shall have the meanings as stipulated below:-

Adobe Portable Document Format (PDF)	The document format promulgated by Adobe Systems Incorporated [Document reference and version: PDF Reference, Version 1.2, Version 1.3, Version 1.4 and Version 1.5].

American Standard Code for Information Interchange (ASCII)	The standard for the coding of characters promulgated by the American National Standards Institute (ANSI) [Document reference: ANSI-X3.4-1986 (R1997)] and the International Organization for Standardization [Document reference: ISO-14962:1997].
Arc/Info Export Format (E00)	The format for the exchange of spatial data for the use in Arc/Info, which is a Geographical Information System (GIS) software developed by the Environmental Systems Research Institute, Inc. (ESRI).
Arc/Info Native Format (COV)	The format for the exchange of spatial data for the use in Arc/Info, which is a Geographical Information System (GIS) software developed by the Environmental Systems Research Institute, Inc. (ESRI).
AutoCAD Format	The graphics file format for the use in AutoCAD, which is a Computer Aided Design (CAD) software developed by Autodesk, Inc.
Autodesk Drawing Exchange Format (DXF)	The three-dimensional graphics file format for the use in Computer Aided Design (CAD) systems promulgated by Autodesk, Inc. [Document reference: AutoCAD Release 13 DXF Ref. – v.u13.1.01, AutoCAD Release 14 DXF Ref. – v.u14.1.04 and AutoCAD 2000 DXF Ref – v.u15.0.02 & v.u16.1.01].
Big-5	The standard for the coding of Chinese characters promulgated by the Institute for Information Industry of Taiwan [Document reference and version: Computer Chinese Glyph and Character Code Mapping Table and Technical Report C-26 (May 1984)].
CAD Standard for Works Projects (CSWP)	The common set of CAD standards used for CAD files and drawings for works projects promulgated by the Environment, Transport and Works Bureau. [Document reference and version: CSWP Document Version 1.02.00 (September 2002)]
Chinese-Japanese-Korean (CJK) Unified Ideographs	The Chinese, Japanese and Korean unified ideographs coded in the ISO10646-1:2000 standard.
E-applications System for Strategic Commodities Licensing (E-SC)	E-applications System for Strategic Commodities Licensing (E-SC) is the information system designated and used by the Trade and Industry Department for providing specific public services online to, and receive electronic information from, members of the community through the Internet in relation to the application and issuance of licences for the purpose of Section 6A(2) and (4) of the Import and Export Ordinance (Cap. 60).
Electronic Government Forms	Government forms, in the form of a software, provided by Government to generate electronic records in a pre-defined format for members of the public to fill in electronically and submit to Government through electronic means.

Electronic Service Delivery (ESD) System	The information system designated and used by Government for providing specified public services online to, and receive electronic information from, members of the community through the Internet and other electronic means.
Encapsulated Postscript Files (EPSF)	The graphics file format promulgated by Adobe Systems Incorporated [Document reference and version: Encapsulated PostScript File Format Specification Version 3.0 (May 1992)].
GNU Zip File Compression Standard	GNU Zip (gzip) is a compression utility. [Document reference and version: The format of the GNU Zip file (.gz) version 4.3 (IETF RFC 1952) (May 1996)].
Graphics Interchange Format (GIF)	The graphics file format version 89a promulgated by CompuServe Incorporated [Document reference and version: Graphics Interchange Format Version 89a (July 1990)].
Hong Kong Supplementary Character Set (HKSCS)	The set of Chinese characters promulgated by the Government of the Hong Kong Special Administrative Region [Document reference: Document of HKSCS-2001 (December 2001)].
Hypertext Mark Up Language Format (HTML)	The document format promulgated by the World Wide Web Consortium (W3C) [Only those HTML features that are implemented by both Microsoft Internet Explorer v6.x and Netscape v7.x should be used.].
Initial Graphics Exchange Specification (IGES)	The graphics file format for the exchange of information in Computer Aided Design (CAD) systems promulgated by the American National Standards Institute (ANSI) [Document Reference: ANSI/US PRO/IPO 100-1996].
ISO 9660	The universal standard for the volume and file structure of CD-ROM for information interchange promulgated by the International Organization for Standardization (ISO) [Document reference: ISO 9660:1988].
ISO 10646-1:2000	The universal standard for the coding of characters in a multi-language environment promulgated by the International Organization for Standardization (ISO) [Document reference: ISO/IEC 10646-1:2000]. The standard is also commonly known as Unicode.
Joint Photographic Experts Group (JPEG)	The graphics file format promulgated by the International Organization for Standardization (ISO) [Document Reference: ISO/IEC 10918-1:1994] and the International Telecommunication Union (ITU) [Document Reference: ITU-T T.81 (09/92)].
MB	The measure of the size of an electronic record. A byte is a standard unit for computer information. One MB (mega-byte) means 1 048 576 bytes of information.
Microsoft Rich Text Format (RTF)	The document format promulgated by Microsoft Corporation [Document reference and version: RTF Version 1.6 (May 1999)].

MicroStation DGN Format	The two-dimensional and three-dimensional graphics file format for the exchange of information in Computer Aided Design (CAD) systems used in the MicroStation software developed by Bentley Systems.
Multipurpose Internet Mail Extension (MIME)	MIME is an extension of the SMTP protocol that enables the exchange of different kinds of data files on the Internet: audio, video, images, application programs, and other kinds, as well as ASCII handled in the original protocol. [Document reference: IETF RFCs 2045, 2046, 2047, 2048, 2049, 2231, 2387, 2392, 2557, 2646and 3023].
1.44MB diskette with size of 3.5 inches in MS-DOS format	A diskette with 1.44MB capacity and size of 3.5 inches complying with the format specified by Microsoft Corporation for the use in the MS-DOS operating system.
Plain Text (TXT)	The document format in which a sequence of characters and the words they form are encoded into computer-readable format using language encoding schemes (i.e. American Standard Code for Information Interchange (ASCII), Big-5 with Hong Kong Supplementary Character Set (HKSCS) and ISO10646-1:2000 with HKSCS) specified in this Notice.
Portable Network Graphics (PNG)	The standard for image compression published by the Internet Engineering Task Force (IETF) [Document reference and version: PNG second edition (ISO/IEC 15948:2003) (November 2003)].
Public-Key Cryptography Standards (PKCS#7)	A general syntax defined by RSA Security, Inc. for data that may have cryptography applied to it. [Document reference and version: PKCS #7: Cryptographic Message Syntax Standard Version 1.5 (IETF RFC 2315 (March 1998))].
Secure Multipurpose Internet Mail Extension (S/MIME)	S/MIME is the standard of the format of electronic mail message promulgated by the Internet Engineering Task Force (IETF) [Only those S/MIME (version 3) features that are implemented by both Microsoft Outlook Express 6.x and Netscape Mail 7.x should be used.].
Simple Mail Transfer Protocol (SMTP)	The standard for the protocol for the exchange of electronic mail among computer systems promulgated by the Internet Engineering Task Force (IETF) [Document reference and version: IETF RFC 2821 & IETF RFC 2822 (April 2001)].
Tag Image File Format (TIFF)	The graphics file format promulgated by Adobe Systems Incorporated [Document reference and version: TIFF Version 6.0 (June 1992)].
Zip File Compression Standard	The standard for file compression promulgated by WinZip Computing Incorporated [Document reference and version: IETF RFC 1951 (May 1996)]

This NOTICE shall not apply unless the information is given or presented, the document is served or the signature is made, in the form of an electronic record, to a government entity as defined in the Electronic Transactions Ordinance, or a person acting on behalf of that government entity.

This NOTICE supersedes the NOTICE G.N. 5651 published by the Secretary for Commerce, Industry and Technology on 22 August 2003, which shall cease to have effect upon the Effective Date.

27 January 2005

Francis Ho *Permanent Secretary for Commerce, Industry and Technology (Communications and Technology)*